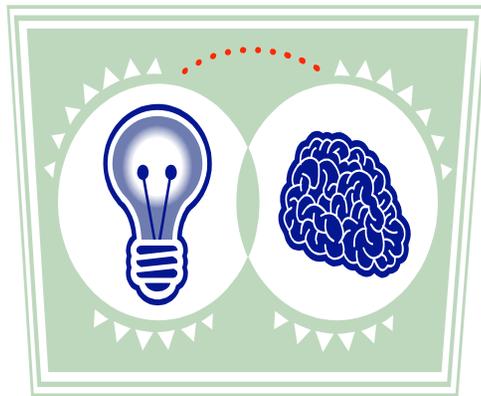
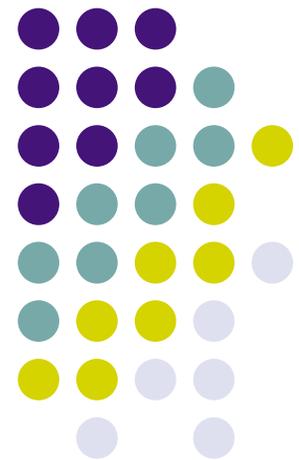


# Systems used in infants/ children to individuate objects



Nicole Dailey  
Q400 2-9-05





- Information in environment effect establishing representations
- Spatiotemporal
- Perceptual Property
- Object-Kind Information

# Object-Based System



- Early Infants (4 months)
- Spatiotemporal Overrides Perceptual
- Spatiotemporal Continuity
- Perceptual system is fragile for this

# Kind-Based System



- Starts around 12 months
- Kind overrides perceptual  
(however, on a spectrum ex: changing leaves)
- Perceptual are kind relative
- Learn Kind over Properties  
(success when duck vs. ball but not yellow, rubber vs. red, sphere)

# Synthetically Tested Through: Shown objects behind screens



- Given different objects of color, size, shape in trials
- Put on both sides of screen
- Tested looking time (habituation)
- Only looked at unexpected longer in Cross-kind
- ?? Maybe too salient or familiar but evidence for KIND system used!!



## Why the change??

- 12 months use kind rather than shape
- “Look, it’s a blate” (noun=kind similarity)
- “Look, it’s a blatish one” (adjective=property similarity)
- Language in kind distinctions versus shape  
    OR is 1<sup>st</sup> yr. Infants interacting and learn properties?

# Question to Think About??



- When you see someone with brown hair and purple class and you see someone the next day with purple hair and brown glasses, do we always believe it's two different people or do we sometimes think it's differences in appearances of the same thing?
- (also wanted you to see how this applies to you!)



# References

- Xu, F. (2003) The development of object individuation in infancy. In H. Hayne & J. Fagen (eds.), *Progress in Infancy Research, Vol. 3* (pp. 159-192). Mahwah, NJ: Lawrence Erlbaum.
- Xu, F., Carey, S. & Quint, N. (2004) The emergence of kind-based object individuation in infancy. *Cognitive Psychology, 49*, 155-190.
- Waxman, S.R., & Markow, D. R. (1995). Words as invitations to form categories: Evidence from 12-13 month-old infants. *Cognitive Psychology, 29*, 257-302.